

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraphs starting on page 6, line 16 and ending on page 7, line 4 with the following:

The gas cooler 2 serves to cool the coolant carbon-dioxide of high temperature and pressure compressed by the compressor 1 in heat-exchange for the ambient air etc. In order to promote the heat-exchanging action or ensure this action ~~even at~~ even when a vehicle is at a standstill, the gas cooler 2 is equipped with a cooling fan 6. For example, the gas cooler 2 is arranged on the front side of the vehicle to allow the internal coolant carbon-dioxide to radiate heat to an outdoor air temperature as possible.

The pressure control valve 3 operates to reduce the pressure of the coolant carbon-dioxide of high pressure since it passes through a decompression hole. Not only decompressing the coolant carbon-dioxide, ~~the~~ but the pressure control valve 3 has a function to control a pressure of the gas cooler 2 on its exit side, so that the coolant carbon-dioxide decompressed by the valve 3 flows into the evaporator 4 in the form of gas-liquid phases. Unlimitedly in the embodiment, for example, there is a decompression valve (e.g. valve disclosed in Japanese Patent Application Laid-open No. 2000-206780) that controls an opening-closing duty ratio of the decompression hole through electrical signals as the pressure control valve 3.

Please replace the paragraphs starting on page 10, line 27 and ending on page 11, line 14 with the following:

At the initial stage of heating, since the coolant avoids the evaporator 4, the air conditioning wind supplied into the vehicle cabin is not cooled down, so that the temperature in the vehicle cabin rises quickly. Then, the coolant avoiding the evaporator 4 is separated into the liquid coolant and the gas coolant at the ~~accumulator 4~~ accumulator 5. Mainly, the gas coolant is sucked in the compressor 1.

At the normal stage of heating, the coolant absorbing heat at the gas cooler 2 is supplied to the evaporator 4 without passing through the pressure control valve 3. Then, the coolant absorbing heat at the evaporator 4 is separated into the liquid coolant and the gas coolant at the accumulator. Mainly, the gas coolant is sucked in the compressor 1. This operation mode is so-called “dehumidifying/heating mode” where the air conditioning wind is dehumidified ~~—5—since~~ since the coolant absorbs heat from the air conditioning wind supplied into the vehicle cabin. Further, it is also possible to differentiate the temperature about a passenger between upper and lower sides thereof by allowing the air conditioning wind to be cooled down at the evaporator 4 (e.g. passengers’ head cool and passengers’ feet warm).